

OLD ARUBA

In the September 25 issue, the NEWS published a translated digest of a travel article about Aruba, first published in Holland in 1911. The first installment told of the gold mining industry; this final one recalls the phosphate mines which prospered 60 years ago where Lago Colony now stands.

The Phosphate Mines

While the gold mines are found over the entire area of Aruba, such is not the case with the phosphate mines, which are only in the southeastern part of the island, around two low hills, the Cerro Colorado (*Lighthouse Hill*) and the Cerro Culebra (*Hospital Hill*). Early in 1909 phosphate was also discovered along a lower ridge situated a little to the north.

The Cerro Colorado is the extreme southeast tip of the island and is a round plateau about 33 meters above sea level covering an area of 22 hectares with vertical slopes. Enormous breakers pound these steep slopes, and the white foam can be seen miles away splashing high above the rocks.

The late J.H.W. Gravenhorst discovered phosphate at Aruba in 1874. It has been mined regularly since 1881 by the Aruba Phosphate Company. During the first years of exploitation it produced a good revenue for both the company and the Colonial Treasury, which received Fls. 8 per cubic meter, and total receipts for the Government up to 1895 amounted to Fls. 2,000,000.

However, in 1892, when prices began to fall due to the phosphate exploitation in Florida, the company began to work

at a loss, and finally in 1895 when the contract was modified, it had a deficit on its profit and loss account of more than Fls. 100,000, and although the concession terms are now a little more favorable, it has not yet succeeded in getting over this loss.

The exploitation of the phosphate deposits is relatively simple. The mineral is found in layers, sometimes as thick as six meters, deposited on the original rock of the hills and partly covered by the more recent limestone. Its color is yellow to reddish-brown and liver-colored. Primarily only the upper part of the layers was exploited, and not until 1889,



while digging a well, did they discover quite accidentally a subterranean continuation of the layers. The thickness of the layers varies greatly.

In the surface mining, holes of three feet in depth are drilled with hand drills and the phosphate is worked loose with dynamite. As operations go deeper we come across hollow rocks and finally under a roof of this type of rocks where a few pillars of phosphate are left standing to support the roof. Later these pillars of phosphate are removed as soon as the entire layer has been excavated and it makes no difference whether the roof falls in at some places. (*See cut*) This is a hazardous job and must be done very cautiously.

Simultaneously with the exploitation of the quarries at the surface, the deeper situated section of the layer is worked

by making a mine shaft, with enormous tunnels and vaults starting from that shaft.

The phosphate is shipped from San Nicolas Bay at the west coast of the island. Transportation from mines to docks is along a narrow gauge railway in trains of 20 tip wagons pulled by a locomotive. *Ed. note: The present road from Bungalow 177 to Lighthouse Hill was the roadbed of this old railroad. Ten years ago the ties could still be seen (and occasionally felt, as one drove over the road).*

The harbor is very safe, located on the leeward side and protected by a reef, but entering and leaving is difficult, and the phosphate company employed its own pilot until 1908, when the Government took over the pilot service. The company has its own tugboat to move the schooners loading its product.

The entire exploitation and other operations are under good management, and there is order and regularity.

A total of 446,445 tons of phosphate was exported during the period 1881 — 1909, while the maximum annual figure was reached in 1907, when exports aggregated 34,689 tons. Up to the present only first class phosphate has been mined, of a grade of more than 70 per cent calcium phosphate; however, there are still large quantities of unmined phosphate of less high quality due to a high percentage of detrimental substances. It is not so easy to find a market for this product, and its lower price would make it impossible to exploit it advantageously under the present concession terms.

Most of the phosphate is shipped to England, France, and the United States, and there processed to superphosphate by treating it with sulphuric acid, and used as artificial fertilizer.

Surface cave-ins show where the phosphate miners tunneled out under the caprock. (Note the natural pillars supporting roof near center of picture). In the lower right corner can be seen a great block of the original surface, which has settled into the mine. Much of this area, northeast of Hospital Hill, is said to be hollowed out underground.



E fotografia aki ta muestra con un di e daknan di cual nos ta papia den e articulo ariba página siguiente a zak kai aden i nos por mira unda e mineronan di fosphaat tawata traha bao di e baranca (Mira na centro di e portret e pilarnan cu e mineronan a laga pa sostenene e dak). Abao, banda drechi, nos por mira un pida tera grandi cu a zak kai den e buracu. Nan ta bisa cu un gran parti di e terreno pa nort-west di Cero Corá ta fofa pa motibo di tonelnan grandi cu ta pasa bao di tera.